

METASTATIC BREAST AND COLON CANCER REGULATED GENES

ABSTRACT OF THE DISCLOSURE

Gene sequences as shown in SEQ ID NO:1-18 have been discovered and isolated, and found to be significantly associated with metastatic spread of breast and colon cancer cells to other organs. Methods are provided for determining the risk of metastasis of a breast or colon tumor, which involve determining whether a tissue sample from a tumor expresses a polypeptide encoded by a gene as shown in SEQ ID NOS:1-18, or a substantial portion thereof. One of the gene sequences encodes a novel aspartyl protease termed CSP56, which can be used to provide reagents and methods for determining which tumors are likely to metastasize and for suppressing metastases of these tumors. Clinicians can use this information to predict which tumors will metastasize to other organs and to provide relevant therapies to appropriate patients.